

# The EU ETS: From Two Perspectives

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# The Two Perspectives

- A Single-state Cap & Trade System
  - Highly decentralized, like US NO<sub>x</sub> Program
  - 1<sup>st</sup> CO<sub>2</sub> and largest cap-and-trade system
  - Many lessons for US or other systems
- A Multinational (Global?) System
  - Member states are sovereign nations
  - Large differences among member states
  - Many lessons for potential global system

# The EU ETS in Brief

- A partial system
  - CO<sub>2</sub> only; large stationary sources
- Successive compliance periods:
  - 2005-2007, 2008-2012, post-2012
- National Allocation Plans
  - Decentralized allocation/ cap-setting
- Interesting and novel rules for banking and borrowing
- Free allocation and limited offsets

# EU ETS: Results

- Infrastructure in place to limit GHGs
- Sophisticated CO<sub>2</sub> market
  - Only uniform price in the EU
  - Incorporated into business decisions
  - World-wide impact on projects
- Modest abatement & little to no trade impact
- No transforming technological innovation

# Despite Great Odds

- A new and unfamiliar regulatory instrument
- Little experience and some hostility to emissions trading
- Rushed implementation
- Very poor data on installations and ETS emissions

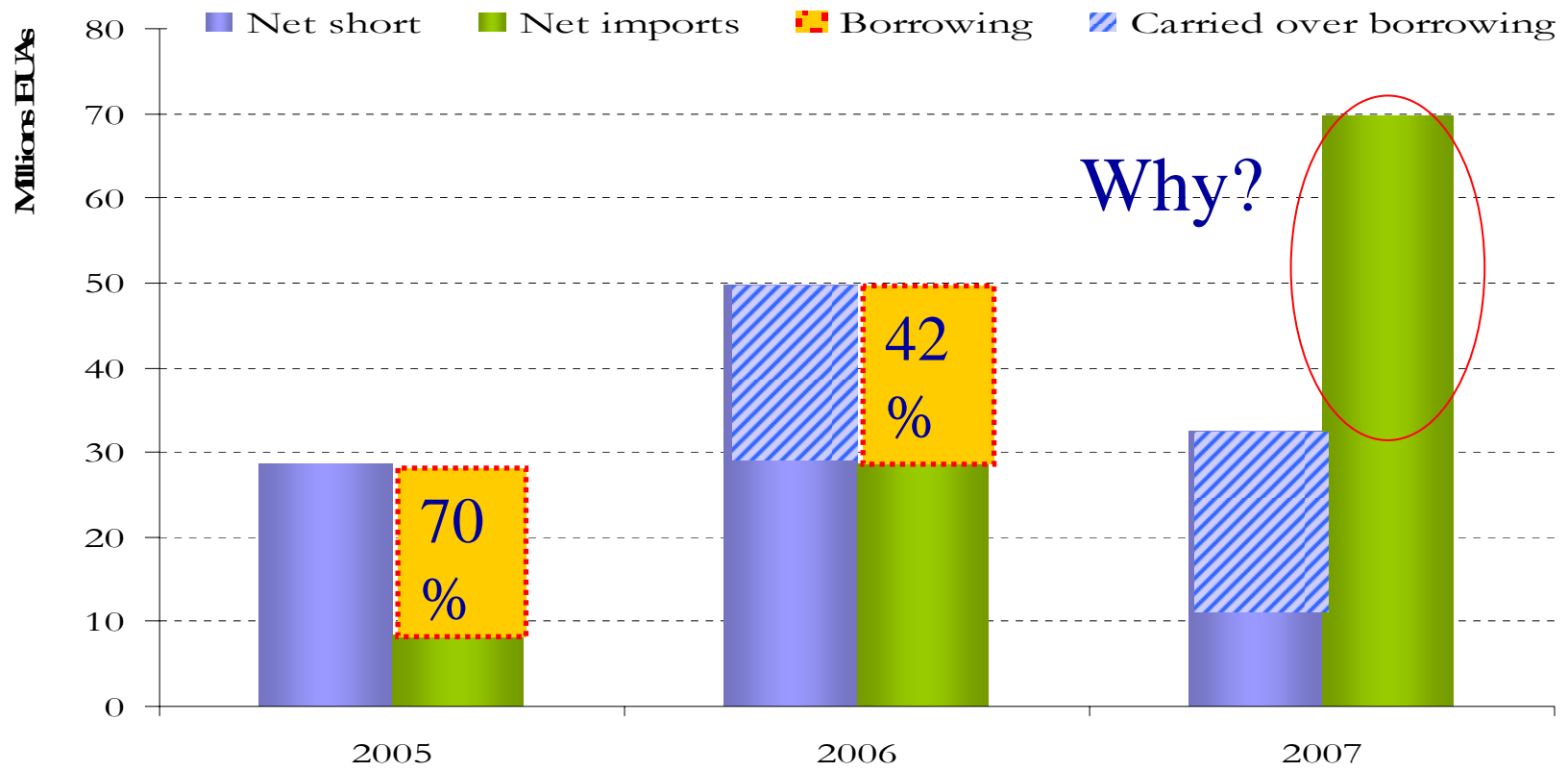
# Economic Impact Is Imperceptible

- No visible macro-economic effect
  - De-industrialization of Europe??
- No visible trade impact either
  - Also little effect, but short-term only
- Why? CO<sub>2</sub> is but one price among many
  - All others as important now as before
  - True for long-term investment, also?

# Borrowing Worked without Abuse

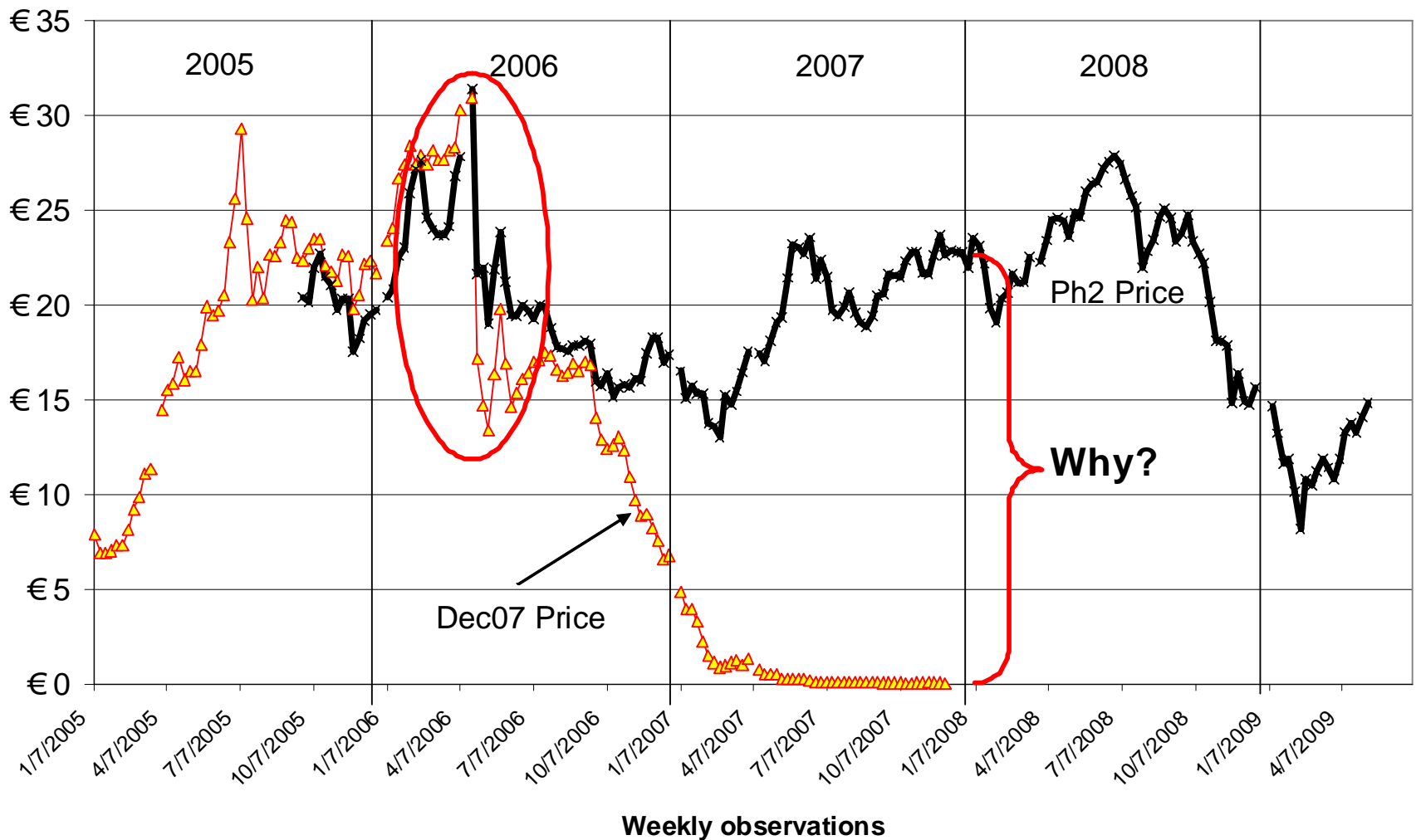
- Only cap-and-trade system with unrestricted year-ahead borrowing
  - Used by many in 2005-06 (16% to 30% of ~3000 shorts)
- An alternative compliance option that reduced demand when prices were high
  - All paid back in 2007

# Evidence of Borrowing in the UK





# EUA Prices: Data and Design Matter!



# Post-2012 Changes

- EU-wide cap set in legislation
- Rapid phase-out of free allocation
  - Electric utilities: full auctioning 2013 on for EU15, Eastern Europe by 2020
  - Industry: Largely free allocation on trade grounds
  - ~60% auctioning in 2013 to 100% by 2027 (in theory)
- Harmonized benchmarks for residual free allocation

# Other Lessons

- Largely confirms US experience with cap-and-trade
  - Markets emerge effortlessly
  - Agents internalize price in decisions
  - Emissions reduced with few other effects
  - Unexpected forms of abatement
- Allocation is a big deal
- Good data needed for cap-setting
- Expanding coverage is not easy

# Now, The Multinational Perspective

- The EU is neither a strong federation nor homogeneous
  - The Commission, Directives, and Treaties
  - East-West and North-South divides
- Non-problems
  - Institutional readiness
  - Cross-border financial transfers
- Global system would likely resemble the highly decentralized 1<sup>st</sup> period

# Trial Periods & Limited Sector Scope

- Trial periods would be useful for all
  - Resolves infrastructure and data issues
  - Reassures existing systems about integrity
- Partial coverage first?
  - Not the ideal, but more important/realistic
  - Major reductions are in electricity sector
  - Inclusion of industrial sectors deals with trade and leakage issues

# Defining a Center

- The indispensable role of the EU Commission
  - Dealing with cap inflation: special powers
  - Educating and facilitating
- An adventitious and available institution
  - Subsequent centralization an EU phenomenon?
- What could serve on a global scale?
  - Players only and limited delegations

# Club Benefits

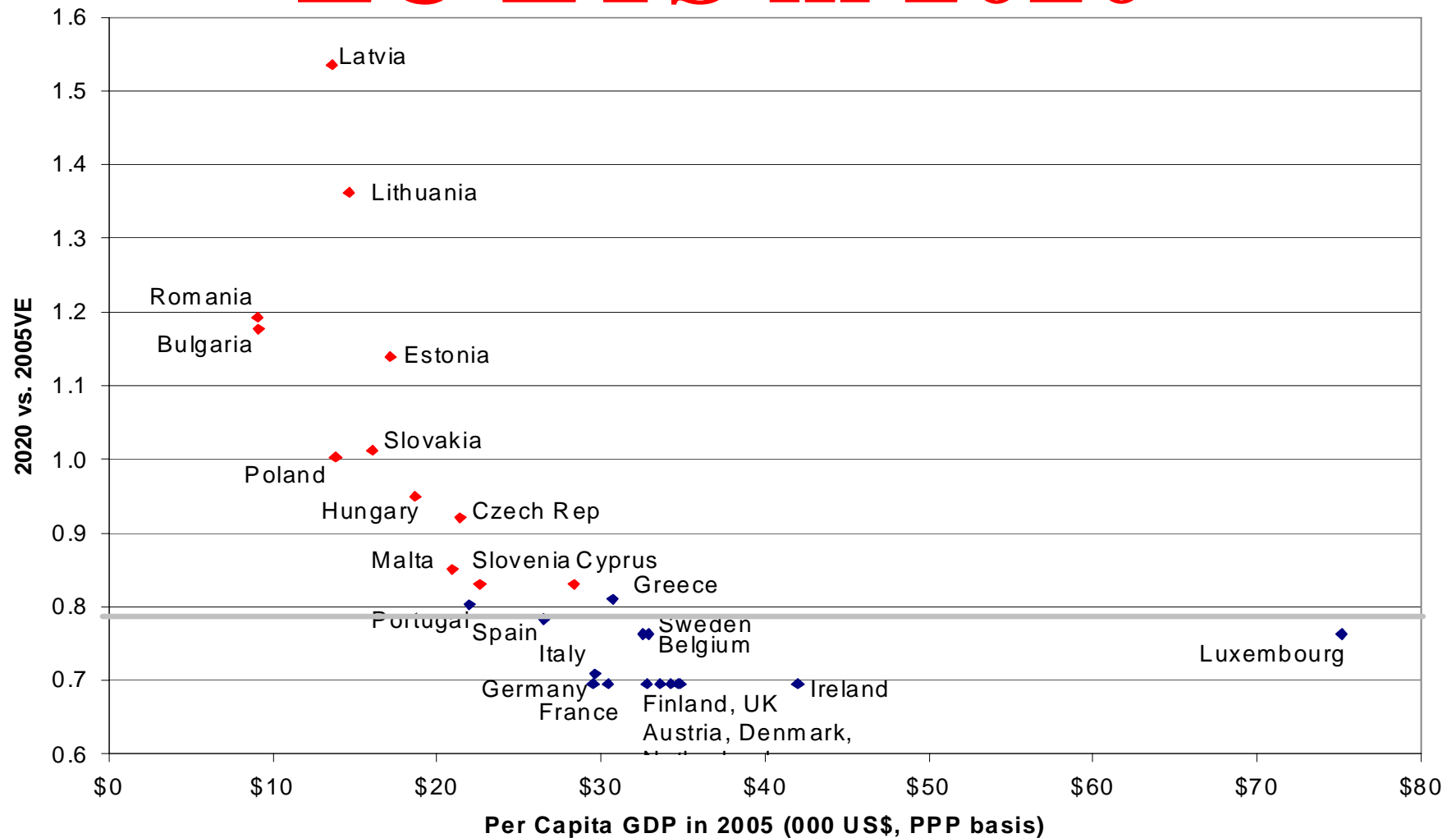
- Varying commitments and sincerity of commitments and yet all belong. Why?
- The broader benefits of the EU
  - Part of the package; no variable geometry
- Another fortunate, almost accidental feature
- What will serve on a global stage?
  - Linkage is the essence of diplomacy
  - Many dimensions possible

# Stringency, Differentiation & Harmonization

- A “broad then deep” strategy
  - All inclusive, non-demanding beginning
  - Increasing differentiation with greater stringency
  - Participation of the less committed in decisions
- The new problem of harmonization
  - Equality vs. differentiation
  - The EU solution: auctioning harmonizes all
  - Differentiate through auction rights



# Differentiation in the EU ETS in 2020



# The EU ETS: A Global Prototype?

- Pre-existing institutions made it a lot easier for the EU ETS
- But technical competence, politically astute implementation & accident were important
- Do we build the global institutions, or can they arise out of bottom-up, bilateral deals?
- Challenges are not unique to trading regimes